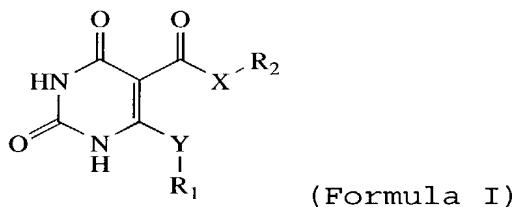


CLAIMS

We claim:

1. A compound of the formula:



or a pharmaceutically acceptable derivative or prodrug thereof; wherein

Y is selected from O, NH, N(R), S, S(O) or S(O)₂;

X is selected from O, NH or N(R);

R¹ and R² are each independently selected from H, a C₁-C₆ straight chain or branched alkyl or alkenyl group, optionally substituted with one to four substituents, each of which is independently selected from NH₂, NHR, N(R)₂, NO₂, OH, OR, CF₃, halo, CN, CO₂H, CONH₂, CONHR, CON(R)₂, COR, SR, S(O)R, S(O)₂R, S(O)₂NH₂, S(O)₂NHR or R; a 5-7 membered aromatic or non-aromatic carbocyclic or heterocyclic ring, optionally substituted with one to four substituents, each of which is independently selected from NH₂, NHR, N(R)₂, NO₂, OH, OR, CF₃, halo, CN, CO₂H, CONH₂, CONHR, CON(R)₂, COR, SR, S(O)R, S(O)₂R, S(O)₂NH₂, S(O)₂NHR or R; or a 9-10 membered bicyclic aromatic or non-aromatic carbocyclic or heterocyclic ring optionally substituted with one to four substituents, each of which is independently selected from NH₂, NHR, N(R)₂, NO₂, OH, OR, CF₃, halo, CN, CO₂H, CONH₂, CONHR, CON(R)₂, COR, SR, S(O)R, S(O)₂R, S(O)₂NH₂, S(O)₂NHR or R; wherein said heterocyclic ring contains 1 to 4 heteroatoms, each of which

heteroatoms are independently selected from N, O, S, SO or SO₂; and

R is selected from a C₁-C₆ straight chain or branched alkyl or alkenyl group, a 5-7 membered aromatic or non-aromatic carbocyclic or heterocyclic ring, or a 9-10 membered bicyclic aromatic or non-aromatic carbocyclic or heterocyclic ring system.

2. The compound according to claim 1, wherein the compound is selected from any one of the compounds depicted in Table 1.

3. A pharmaceutical composition comprising an amount of a compound according to either of claims 1 or 2 effective to inhibit JNK, and a pharmaceutically acceptable carrier.

4. A method of treating or preventing inflammatory diseases, autoimmune diseases, destructive bone disorders, proliferative disorders, infectious diseases, neurodegenerative diseases, allergies, reperfusion/ischemia in stroke, heart attacks, angiogenic disorders, organ hypoxia, vascular hyperplasia, cardiac hypertrophy, thrombin-induced platelet aggregation or conditions associated with proinflammatory cytokines in a patient, said method comprising administering to said patient a composition according to claim 3.

5. The method according to claim 4, wherein said method is used to treat or prevent an inflammatory disease selected from acute pancreatitis, chronic

pancreatitis, asthma, allergies, or adult respiratory distress syndrome.

6. The method according to claim 4, wherein said method is used to treat or prevent an autoimmune disease selected from glomerulonephritis, rheumatoid arthritis, systemic lupus erythematosus, scleroderma, chronic thyroiditis, Graves' disease, autoimmune gastritis, diabetes, autoimmune hemolytic anemia, autoimmune neutropenia, thrombocytopenia, atopic dermatitis, chronic active hepatitis, myasthenia gravis, multiple sclerosis, inflammatory bowel disease, ulcerative colitis, Crohn's disease, psoriasis, or graft vs. host disease.

7. The method according to claim 4, wherein said method is used to treat or prevent a destructive bone disorders selected from osteoarthritis, osteoporosis or multiple myeloma-related bone disorder.

8. The method according to claim 4, wherein said method is used to treat or prevent a proliferative disease selected from acute myelogenous leukemia, chronic myelogenous leukemia, metastatic melanoma, Kaposi's sarcoma, or multiple myeloma.

9. The method according to claim 4, wherein said method is used to treat or prevent neurodegenerative disease selected from Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, Huntington's disease, cerebral ischemia or neurodegenerative disease

caused by traumatic injury, glutamate neurotoxicity or hypoxia.

10. The method according to claim 4, wherein said method is used to treat or prevent ischemia/reperfusion in stroke or myocardial ischemia, renal ischemia, heart attacks, organ hypoxia or thrombin-induced platelet aggregation.

11. The method according to claim 4, wherein said method is used to treat or prevent a condition associated with T-cell activation or pathologic immune responses.

12. The method according to claim 4, wherein said method is used to treat or prevent an angiogenic disorder selected from solid tumors, ocular neovascularization, or infantile haemangiomas.